An Addition to the New South Wales Check List of Mollusca

By J. KERSLAKE.

Family VENERIDAE.

Venerupis iridescens Tate (Trans. Royal Society of South Australia. Vol. XI., 1888, p. 61, pl. ii, fig. 10).

The identification of the New South Wales species was made from five single valves found on Collaroy Beach during the past three years. Two of these will be presented to the Australian Museum, Sydney.

Tate has given a long and detailed description of his species from deep water off Kangaroo Island, South Australia. However, for the benefit of local collectors, I will recapitulate a few of the outstanding characteristics. The shell is similar to *Venerupis fabagella* Deshayes in outline and is approximately 15 mm. long. The colour is dirty-white, iridescent and with a few small brown spots. It is ornamented with about fifteen conspicuous laminae and about four concentric, rounded threads in the interspaces. These latter are crossed by fine, close striae.

I am indebted to Miss Hope Macpherson for permission to inspect the South Australian specimens in the National Museum of Victoria.

Notes on Australian Shells

No. 2 By LEE WOOLACOTT.

It is apparent that certain molluscs are migratory. Some species travel slowly from point to point establishing colonies where conditions are suitable, and over a considerable period of time appear capable of withstanding greater differences of temperature and salinity, thus gradually expanding their territory. Others probably drift in the ocean currents in the larval stage, and being of a sturdy nature capable of considerable adjustment to differing conditions, survive long enough to breed and so form populations which may live and go on breeding for many years, or even become permanent additions to our molluscan fauna. Another probability is that, in the past, when ships unloaded ballast, the eggs and partly-grown molluscs were dumped at various places along our coast. Some species are remarkably tenacious of life and, so long as they are able to find food which they can use, will survive extremely varying conditions. It is very likely that the unloading of ballast with the accompanying eggs or young is responsible for the establishment of a sizable colony of *Conomurex luhuanus* at Shellharbour (on the south coast of N.S.W.), a colony which has thrived there for well over forty years.

The ebb and flow, the ever-changing pattern of population density, and the ability of certain molluscs to survive and breed are of interest

and concern to all molluscan collectors.

It is difficult to assess the stability of various tropical molluscan populations which are found on the coast of N.S.W., especially the far north coast where collectors are few and information not readily available, but in the region of the Clarence River, both north and south of the entrance, there are to be found many tropical species which have, undoubtedly, set up permanent colonies.

One of these, Mancinella mancinella, can be traced back for, at least, fifteen years. Small, immature specimens have been found by John Laseron and other collectors at Woolgoolga over a number of years. I found one good specimen of medium size, perfectly adult in

appearance, at Angourie in 1947. This shell is well described by Joyce Allan in "Australian Shells," p. 145, but a short description may be included here as it is advisable to add this shell to the N.S.W. Molluscan List now that the species has firmly established itself.

Mancinella mancinella Linne (syn. gemmulata Lamarck).
(Figure 7.)

Adult shell about 2 x $1\frac{1}{2}$ inches (Angourie specimen $1\frac{1}{2}$ x 1 in.). A strong creamy-yellow shell with very large body whorl bearing five rows of light chestnut-brown nodules. Numerous fine spiral ridges, stronger towards the base. Longitudinal dense, short lamellae. The penultimate whorl has two rows of small nodules, the remaining three whorls usually eroded. Columella and aperture rich yellow; within the aperture are a number of equally-spaced thin, orange-red ridges which start, in a uniform manner, about one quarter of an inch within the lip.

Family PYRENIDAE.
Genus PYRENE Bolten, Mus. Bolt., 1798.

Pyrene opulens, sp. nov.

(Figure 10)

(Figure 10.)

Size of shell 20 mm. x 12 mm., of six rounded whorls giving a very stout appearance. Ground colour is golden-brown with rich, dark chestnut bands at top of each whorl, apex pink. The pattern consists of seven large, white oval spots set below the chestnut band, at regular intervals, a few clusters of smaller ones irregularly placed and some very small, scattered white spots. Sutures well marked, and there are several small basal ridges. The aperture and columella are white, pale pink or mauve, and there are about seven small nodules within

the lip.

This most attractive, brightly-coloured shell is from Angourie, north coast of New South Wales. It is included in Hedley's Check List of the Marine Fauna of N.S.W. under the name Pyrene filmerae Sowerby. Cn checking this species I was surprised to note the habitat was Pondoland, South Africa. The illustration is quite similar to our shell, but the habitat being so puzzling I kept the shells with a query mark (?) for years. Eventually I was most fortunate, Mrs. Boswell of South Africa being generous enough to send me some of the genuine South African filmerae (see figure 9). It was at once apparent that the shells were quite different. The proportions, background colour and disposition of the spotting are three outstanding differences which are obvious when one has authentic specimens from the two different localities. The N.S.W. shell is much broader, having a swollen appearance, with a rotund spire, brighter colouring and fewer spots. The South African shell, 20 mm. x 10 mm. is darker and narrower; with six whorls slightly tapered and banded with dark brown. Ground colour tan brown heavily and profusely spotted with white, several of these white spots invading the brown bands. Aperture and columella white to mauve with approximately nine nodules within the lip.

Holotype presented to the Australian Museum.

Paratypes: 16 from Angourie, N.S.W., in my possession.

Family TURBINIDAE.

Genus SENECTUS, Swainson 1840. Senectus perspeciosus Iredale. (Figures 3-4.)

This handsome Turbo may have arrived in ballast many years ago or be a survival of the tropical fauna which once inhabited Sydney Harbour; probably the former as no intermediate colonies have been recognised to date. I found this shell in North Harbour in 1943, 1945 and 1951, and Mrs. Trenerry found two very good specimens in the same area in 1956. It is, therefore, obvious that a colony has been established there for some considerable time, and the shell a further addition to our list.

As this shell is always being confused with *Turbo argyrostomus* L. (the silvermouth) it is advisable to give a short description of the main differences.

Both shells are umbilicate and a rich silvery-pearl within the mouth. The greatest difference is in the ribbing: argyrostomus has a small number of large, smooth-looking, rounded ribs, obsoletely scaled (some ribs more prominently scaled), interstices deeply excavated with an occasional small ridge intervening and is yellowish, variegated with chestnut-brown and green. S. perspeciosus has a greater number of smaller, sharply scaled ribs, and the whole shell is over-ridden by closely-set laminations; interstices wider and not so deep. A striking feature of perspeciosus is that the most prominent ribs are jade green. The shell is variegated with ochre, white and fawn-brown; the mouth small and round. The mouth of argyrostomus has a downward flare at the base of the columella.

This shell was formerly known as Turbo speciosus Reeve.

Family OSTREIDAE.

Pretostrea bresia Iredale.

(Figures 11-12.)

(Figures 11-12.)

This oyster is quite common in Moreton Bay and central Queensland under rocks at low tide. I have seen several valves (top valves) from time to time on Sydney beaches, but did not realise their significance until I picked up one of the lower valves at Kurnell in July 1952. The tubular projections reminded me at once, so this will be a further addition to the N.S.W. list.

The shell, irregular in shape, round, oval or trigonal, is radially folded. The folds vary in number from two to eight, mostly weak but occasionally sharp when they bear a resemblance to the cockscomb oyster. Colouring is a most attractive bronze-red or bronze-pink, and internally it is opalescent-white with green-bronze patches. The sculpture consists of irregular, thin lamellose layers. The lower valves develop tubular projections which clasp any irregularities and invade suitable hollows. The adherent area varies greatly in size. As the shell grows older the edge has a tendency to turn upward.

Superfamily MURICACEA. Family MURICIDAE. Genus BEDEVA Iredale 1924. Bedeva vapida, sp. nov. (Figures 5-6.)

A fairly large *Bedeva* found on beaches from central to north Queensland has, so far, been unnamed. Similar to *Bedeva hanleyi* in shape, but much larger and stronger and with the emphasis on the spiral ribbing; the longitudinal ridges fewer and the lamellose scaling very much weaker. The body whorl is larger and broader.

The shell here described is $1\frac{3}{8}$ x $\frac{5}{8}$ inch, though the species grows bigger, and has six to seven whorls. All specimens in my possession are eroded at the apex and have lost the protoconch. The colour ranges from a dull leaden grey to brownish-grey with a faint tendency to a lighter band below the two strong peripheral ribs. The area below the periphery of each whorl bears well-defined brown spiral ridges, ten to twelve on body whorl, three to four on penultimate whorl and decreasing to two strong ones on spire whorls. The strong peripheral ribs are slightly nodulose, the nodules being dirty-cream on the upper rib and brown on the lower. The area between periphery and suture showing a few very weak ridges. The overriding growth striae are barely lamellose on the spire whorls but a little stronger on the body whorl. Aperture ovate, greyish with the brown external ribs showing through, lip dirty-cream. Columella cream and brown, and the canal open.

Holotype presented to the Australian Museum.

Paratypes: 12 from Yeppoon, Queensland, in my possession.

Genus MINNIMUREX gen nov. Genotype Minnimurex phantom sp. nov.

This genus is proposed for very small lamellose Murex with six to eight strong, thick spiral ribs on body whorl and two (occasionally three) such ribs on the remaining whorls; four to eight frilled varices, deep narrow interstices, reticulate, with deep pockets behind the varices. Ribs with a tendency to central guttering and bearing semi-nodulose scales which project laterally for the most part. Aperture oval, canal medium and partly open.

Minnimurex phantom sp. nov.

(Figure 8.)

A small, broad shell 11 x 7 mm., of a cream colour, with approximately six strong, thick spiral ribs on body whorl and two on the remaining whorls. The ribs frequently guttered centrally and bearing semi-nodulose scales projecting laterally and lamellose in part. Inter-stices narrow, deep and reticulated, with deep pits behind the varices; these pits sometimes brown in colour. There are four adult whorls and a glassy 1½-whorled protoconch. The beautifully frilled varices number four on the body whorl and five on the preceding whorls, and they project upwards sharply. The area between the periphery and the well-defined sutures is practically flat. Aperture oval, canal medium and partly open. Found in shell drift from Eden to Angourie, New South Wales. Figured specimen from Gerringong, New South Wales, November 1952.

The dainty little brazieri is smaller and narrower, with five whorls and three-whorled protoconch; the spire, therefore, proportionately longer. It is more lamellose, with seven to eight very small, partially frilled varices to each whorl, and is less strongly reticulate. Colouring usually pink, salmon or yellow with occasional touches of brown on the

varices.

Holotype presented to the Australian Museum. Paratypes: 7 from Gerringong in my possession.

> Family CERITHIDAE. Genus ATAXOCERITHIUM Tate 1894. Ataxocerithium gemmulatum sp. nov. (Figures 1-2.)

Comparable in size to the N.S.W. Ataxocerithiums, but differs

markedly in sculpture and general appearance.

The shell, 9/10ths x 2/10ths of an inch, consists of nine adult whorls and a brown, glassy 1½-whorled protoconch. Colour cream blotched with light chestnut. The five rows of beads on each whorl are remarkably uniform in plan; the three basal rows elongate, the fourth of semi-round beads, and the fifth of longitudinal, very close-set, slightly flattened beads. The three apical whorls with fewer rows. The whorls are slightly rounded and the sutures impressed. Shell is more "stout" in appearance and the spiral sculpture more pronounced than in other N.S.W. members of the genus. Mouth sub-circular, lip slightly flared and marked internally by the ribbing. Canal open. Found at Gerringong, N.S.W., in shell drift with several broken pieces, November 1952.

Holotype presented to the Australian Museum. Paratype: 1 from Gerringong in my possession.

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EXPLANATION OF PLATE 3.

Fig.

- 1. Ataxocerithium gemmulatum Woolacott.
- Ataxocerithium gemmulatum Woolacott; details of sculpture 2. magnified.
- Senectus perspeciosus Iredale. 3.
- 4. Senectus perspeciosus Iredale; operculum.
- 5.
- Bedeva vapida Woolacott.
 Bedeva vapida Woolacott; details of sculpture magnified.
- Mancinella mancinella Linne. Minnimurex phantom Woolacott. 8.
- 9. Pyrene filmerae Sowerby. 10. Pyrene opulens Woolacott.
- 11. Pretostrea bresia Iredale; Lower valve.
- 12. Pretostrea bresia Iredale; Upper valve.

Lee Woolacott del.

